

VidyoRoom™ Users Guide HD-220, HD-200, HD-100 And HD-50



Table of Contents

1	Document Overview
2	Definitions
6	The VidyoRoom Remote Control
8	VidyoRoom On-Screen Icons
10	Initial VidyoRoom Setup for HD-220 Rev A
11	Initial VidyoRoom Setup for HD-220 Rev B
12	Initial VidyoRoom Setup for HD-220 Rev C
14	Initial VidyoRoom Setup for HD-200
15	Initial VidyoRoom Setup for HD-100 Rev. A
16	Initial VidyoRoom Setup for HD-100 Rev. B
17	Initial VidyoRoom Setup for HD-100 Rev. C
18	Initial VidyoRoom Setup for HD-50 Rev. A
19	Initial VidyoRoom Setup for HD-50 Rev. B
20	Initial VidyoRoom Setup for HD-50 Rev. C
21	Initial VidyoRoom Portal Setup
26	Overview of the VidyoRoom Home Page
27	Using the VidyoRoom During a Meeting
35	Settings
43	Web Configuration Pages
47	Product Specifications
49	1080p Configuration with the VidyoRoom HD220 Appendix
51	Regulatory Compliance Appendix
52	Rack Mounting the HD-220 Appendix

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Document Overview



Welcome to Vidyo

Video conferencing solutions that just work. Simply. Intuitively. Reliably. Inexpensively. From anywhere. The VidyoRoom system is simple to use, easy to configure, and voice-activated with continuous presence. Flexible conference control options make it a snap to manage, using either the VidyoPortal^T or a remote control device.

The VidyoRoom HD-220 delivers 60 fps encoding/decoding and displays multiple HD participants. The VidyoRoom HD-100 encodes up to 30 fps and decodes up to 60 fps. The VidyoRoom HD-50 encodes and decodes up to 720p @ 30fps with Logitech Webcam Pro 9000. Both the HD-100 and HD-50 support dual monitors to display conference participants on one monitor and shared applications on the other. The level of video quality is unequaled by systems that require dedicated bandwidth.

And because video conferencing ought to be a natural extension of the way people normally work, the VidyoRoom interoperates seamlessly with Vidyo-Desktop™ clients, making it possible for people to join a conference from their home office or wherever else they might happen to be. This guide details how to use the features of the VidyoRoom.

This guide describes the features of VidyoRoom. You will learn how to:

- Initiate a meeting
- Join a meeting
- Place a direct (point-to-point) call to any user in the system
- Easily search for any user by typing the name in the search field
- Invite someone to a meeting
- Control a meeting
- Manage a personal My Contacts list
- Change settings

Separate guides are available for the administrator portal and end user Vidyo-Portal.

- 1. The VidyoRoom HD-100 and VidyoRoom HD-50 are known as VIDYO-PROD-001 for regulatory compliance purposes.
- 2. The VidyoRoom HD-220 is known as VIDYO-PROD-002 for regulatory compliance purposes.
- 3. TThe VidyoRoom HD-50 Rev C, HD-100 Rev C and HD-220 Rev C are known as VIDYO-PROD-003 for regulatory compliance purposes.

Definitions

As a new Vidyo user, it is helpful to have a basic understanding of the following terms that are used throughout this document:

MULTI-TENANT TERMINOLOGY

The following terms apply if you have a multi-tenant license:

- Tenant Your organization, selection of users or a "user segment."
- Tenant Name Simple identifier within the system and among other tenants.
- Tenant URL The tenant's URL is the URL/FQDN that tenants use to access their virtual portal.

DESTINATIONS

Places where you may interact with the VidyoConferencing System:

- VidyoPortal The Web interface of the VidyoConferencing System
- VidyoDesktop The Vidyo software client running on your local computer, enabling a user to participate in a conference
- VidyoRoom The dedicated Vidyo endpoint appliance for use in a physical conference room

USERS

Anyone who uses the system. There are five types of users:

- Super Admin Has administrative privileges and is responsible for general portal configuration including network settings, components configuration, maintenance (backup and upgrades), tenant configuration and global settings. In a multi-tenant system, has full administrative privileges above the tenant admin and all regular tenant admin rights.
- Admin/Tenant Admin Has administrative privileges. Can add, delete, manage users, set up public rooms and set up groups (define maximum participants and bandwidth for users).
- Operator Can manage meeting rooms and normal users. The operator has the same rights as the administrator.
- Normal Can join meetings, control own meeting and place direct calls.
 Can change own password, set own PIN code and more. This guide is targeted toward such end users.
- VidyoRoom The dedicated Vidyo endpoint appliance. Has the same rights as a normal user.
- VidyoGateway End user for portal. Has no personal room.

A PIN Code is a 3- to 10-digit number that meeting participants must enter before being admitted to the meeting room. It can be set and changed by the admin and user.

VOICE-ONLY CALLS

Registered and guest users can participate in a VidyoConference by phone if the administrator enables this function. The *MyRoom* settings page provides a phone number to join a user's room, as do the *Control Meeting* page and the home page when you select *My Room*. Also, when you invite a participant by email, the phone number and extension appear in the invitation message.

When a participant joins a conference by phone, their phone number appears in the list of participants in the VidyoRoom home page.

MEETING ROOMS (OF EITHER TYPE) OFFER ATTRIBUTES

Meeting rooms are virtual rooms where users of the Vidyo system can gather for VidyoConferences. There are two types of meeting rooms:

- Personal Each user is automatically assigned his or her own personal room. This is the equivalent of a "personal office" in the physical world.
- Public Common public spaces may also be created by the operator and administrator only. These are the equivalent of conference rooms in the physical world.

Meeting rooms of either type have the following attributes:

- Maximum Bandwidth The maximum bandwidth connection of the room per user. Determined by the group the room is associated with. The maximum is 10000 Kbps for upstream and downstream signals.
- Maximum Number of Users The maximum number of users that can be allowed into the room at once at any given time. Determined by the group the room is associated with. The default policy limit is 10 and is configurable in the VidyoPortal at the tenant level.
- Locked / Unlocked A locked meeting room can have no new entrants.

PIN Protected – A PIN-protected room requires the user and meeting invitees to enter the specified PIN in order to be admitted to the room.

GROUPS

- Users, Public Meeting Rooms and VidyoRoom Users belong to a provisioning Group.
- Upon creating a VidyoRoom account, a personal room is automatically generated.
- Such groups are managed by the users with Administrative or Operator rights.
- The configurable attributes include the maximum number of participants and maximum bandwidth for the Conference Room.
- The values for maximum users and bandwidth apply to groups, and all meeting rooms inherit those values when they are created for a group. All personal and public rooms can have different values for the maximum number of participants only by changing the group they belong to. The

Definitions

bandwidth limitation is per user, so changing the group a user belongs to might also affect their bandwidth limitation and the maximum number of participants that can be in their room.

 A default Group is set up with the system. It can be modified but not removed.

The default group has the following factory configuration:

- Max Number of Participants: 10
- Max Receive Bandwidth Per User (Kbps): 10000
- Max Transmit Bandwidth Per User (Kbps): 10000

Note: The bandwidth limitation applies to the user, so two users can have different limitations while participating in the same conference. The maximum number of participants is limited according to the room the meeting is held in - so this applies to all users in a meeting.

DIRECT CALL (POINT-TO-POINT)

You may directly call a specific user in a direct call. A direct call involves just two users; no additional users can join. When you call a meeting room and there are just two of you in the room, it is similar to being in a direct call. The difference with calling a meeting room is that others can potentially join you in the meeting. This is not so in a direct call.

Note: When you are in a call, you cannot attend a meeting or place another call until you exit your current call.

MEETING (CONFERENCE)

A meeting is an audio and video connection of a meeting room with two or more users interacting and sharing their video streams/presentations.

MEETING ROOM STATUS

Each meeting room has a status that indicates whether it is available for you to join. In addition, a room may require a PIN number to gain access. When you cannot join a room, the *Join Room* button is inactive. There are five room statuses:



Empty — The room has no one in it and you can join it. The *Join Room* button is active.



Full — The room is occupied and cannot accept more participants. The *Join Room* button is inactive.



Locked — The room is locked and you cannot join it. The *Join Room* button is inactive.



Occupied — The room is occupied but additional participants can join it. The *Join Room* button is active.

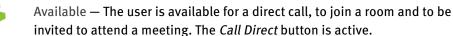
Definitions

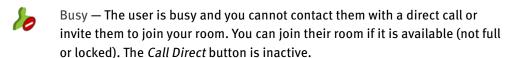


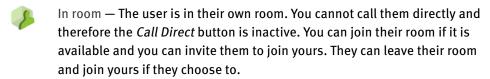
PIN Protected — You must enter a PIN number to join the room. The *Join Room* button is active, but you are denied access to the room without the correct PIN.

USER STATUS

A user's status determines whether you can place a direct call to them, join their room or invite them to attend a meeting. There are eight user statuses:





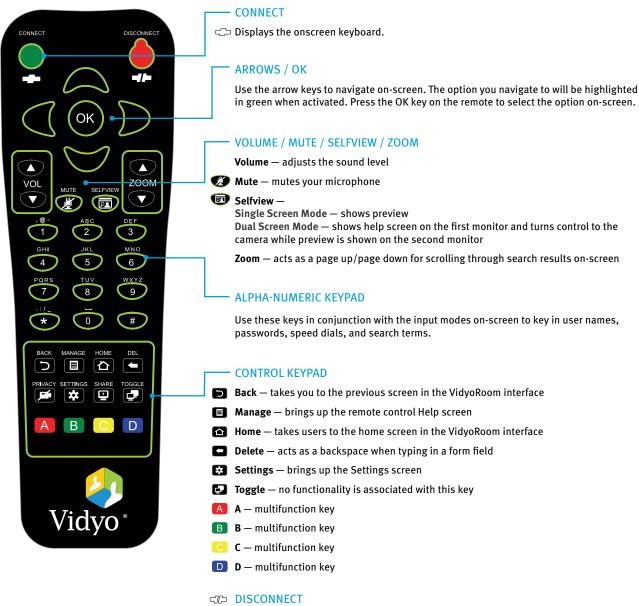


- In room/room full The user is in their own room and the room is full. You cannot call them directly or join their room. They can leave their room and join yours if they choose to.
- In room/room locked The user is in their own room and the room is locked. You cannot call them directly or join their room. They can leave their room and join yours if they choose to.
- In room/room PIN protected The user is in their own room and the room is PIN protected. You cannot call them directly, but you can join their room if you have their PIN code. They can leave their room and join yours if they choose to.
- Offline The contact is not logged into the VidyoPortal. The *Call Direct* button is inactive. You cannot place a direct call to them, but you can join their room.
- Legacy End user for portal. Has no personal room.

The VidyoRoom Remote Control

The VidyoRoom comes with a remote control allowing quick key shortcuts to frequent VidyoRoom activities. It also provides the input mode/keyboard for typing information. Some controls behave differently depending on whether or not you're in a conference.

Not In Conference



Exits meeting



VidyoRoom On-Screen Icons

Various icons appear in the lower right-hand corner of the VidyoRoom's screen to provide information on the call state and the currently selected options. Here's a quick rundown on the icons you may encounter from time to time.



Speaker Mute — Displayed when local speakers are muted (volume turned all the way down via remote control).



Microphone Mute — Displayed when local microphone is muted via remote control.



Privacy — Displayed when local camera is muted (Privacy mode **■** enabled via remote control).



Number of Displayed Participants – Displayed when the number of participants to view is selected via remote control (number will change based on the number of participants selected on the remote control, 1-8; o selects all participants and the icon disappears).





Not Sharing — Displayed when the VGA2USB/VGA2USB LR adapter is connected and you can share but have chosen not to by clicking the Share button on the remote .



Share Ready — Displayed when the VGA2USB/VGA2USB LR adapter is connected and the Share has successfully synchronized. Press on the remote control to then share the desktop connected to the adapter (once the Share is activated this icon will scroll away and you'll see the Remote Share icon).



Remote Share — Displayed when a remote participant Share is available. It's also displayed after a local Share is enabled using the VGA2USB/VGA2USB LR adapter.



Shortcuts During Call:

Press 90 on the remote keypad - Shows current Maximum Send Bandwidth

Press **9#** on the remote keypad - increases Maximum Send Bandwidth (applicable only to current call; not saved)

Press $\mathbf{9}^*$ on the remote keypad - Decreases Maximum Send Bandwidth (applicable only to current call; not saved)



Recording — The conference is being recorded. (The optional VidyoReplay component must be installed.)



Webcasting— The conference is being webcast. (The optional VidyoReplay component must be installed.)



Secure — The audio and video streams between the VidyoRoom and endpoints is encrypted.

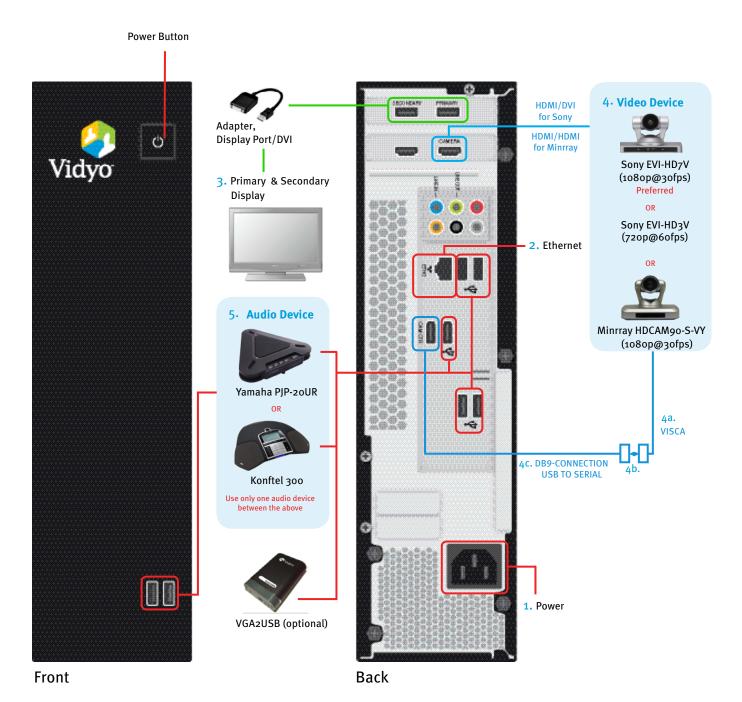


Far End Camera Control — Displayed when you press C to enter Far End Camera Control Mode, (FECC) which allows you to remotely adjust the camera(s) on other VidyoRoom systems participating in the same conference. Press the Left and Right directional keys on the remote to scroll through the various remote VidyoRooms (if available) that have FECC enabled and select the one you wish to control and press OK. Press C again to release the Far End Camera Control and return to local camera control.



No valid video capture device is available. **Note:** A BlackMagic card is considered a valid video capture device.

Initial VidyoRoom Setup for HD-220 Rev A



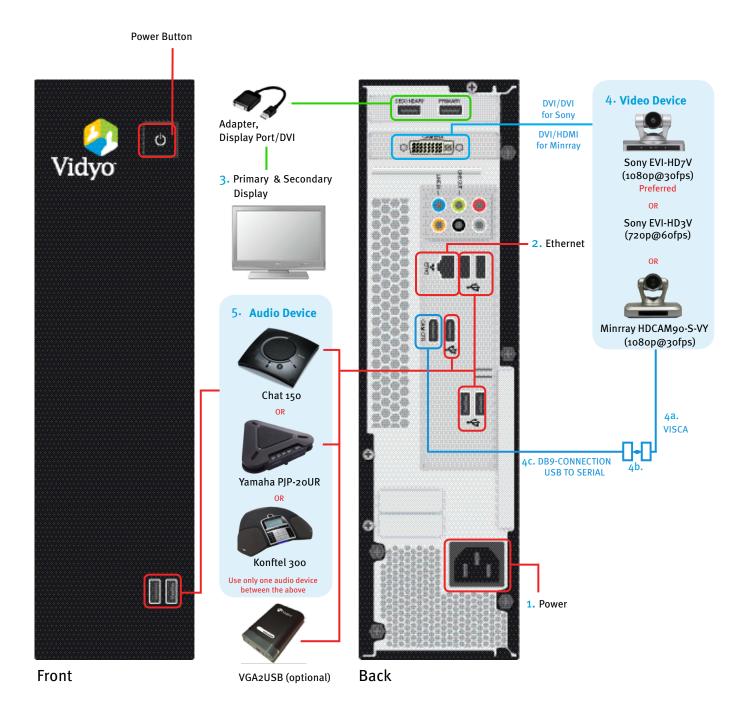
NOTE: Stands must be used when placing the unit vertically.

Do not power on the HD-220 unit until Display(s) and Camera are fully connected and powered on.

- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect the TV using HDMI/DVI cable to DVI Display dongle and then connect to an available display port.
 - * Repeat for the second display

- 4. Connect camera:
 - * For video connection use HDMI/DVI cable for Sony or HDMI/HDMI cable for Minrray
 - * For Camera Control connection:
 - a. Connect VISCA cable to camera
 - b. Connect VISCA cable to USB/Serial DB9 cable
 - c. Connect USB/Serial DB9 cable to the CAMCTRL port on the unit
- Connect a USB SpeakerPhone cable to an available USB port.

Initial VidyoRoom Setup for HD-220 Rev B



NOTE: Stands must be used when placing the unit vertically.

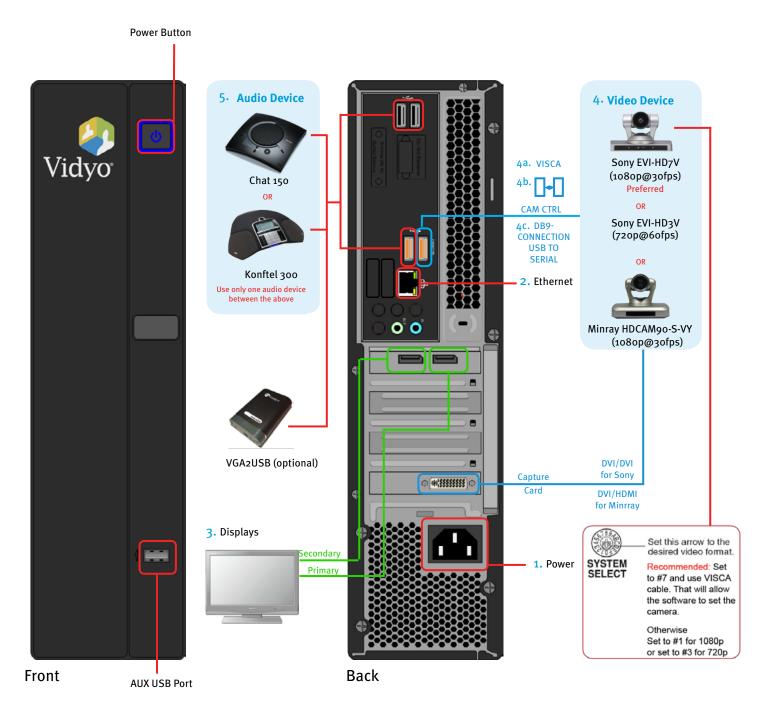
Do not power on the HD-220 unit until Display(s) and Camera are fully connected and powered on.

- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect the TV using HDMI/DVI cable to DVI Display dongle and then connect to an available display port.
 - * Repeat for the second display

4. Connect camera:

- * For video connection use HDMI/DVI cable for Sony or HDMI/HDMI cable for Minrray
- * For Camera Control connection:
 - a. Connect VISCA cable to camera
 - b. Connect VISCA cable to USB/Serial DB9 cable
 - c. Connect USB/Serial DB9 cable to the CAMCTRL port on the unit
- Connect USB SpeakerPhone cable to an available USB port.

Initial VidyoRoom Setup for HD-220 Rev C



NOTE: Stands must be used when placing the unit vertically.

Do not power on the HD-220 unit until Display(s) and Camera are fully connected and powered on.

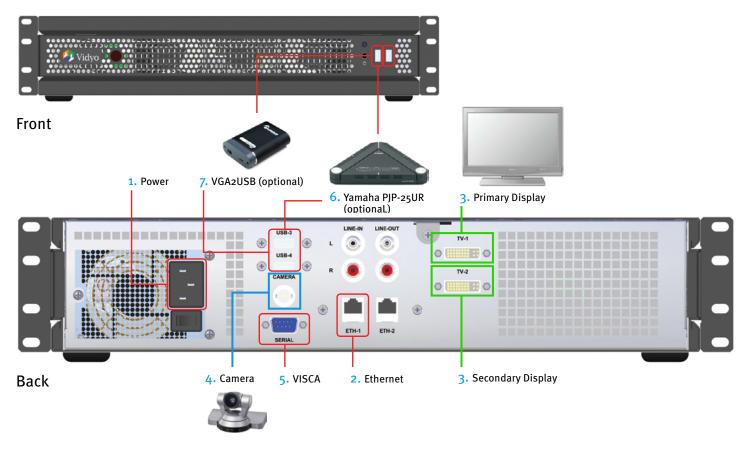
- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect the TV using HDMI/DVI cable to DVI Display dongle and then connect to an available display port.
 - * Repeat for the second display

4. Connect camera:

- * For video connection use HDMI/DVI cable for Sony or HDMI/HDMI cable for Minrray
- * For Camera Control connection:
 - a. Connect VISCA cable to camera
 - b. Connect VISCA cable to USB 2.0/Serial DB9 cable
 - c. Connect USB/Serial DB9 cable to the CAMCTRL port on the unit
- Connect USB SpeakerPhone cable to an available USB 2.0 port. (Do not use USB 3.0 ports.)

Initial VidyoRoom Setup for HD-200

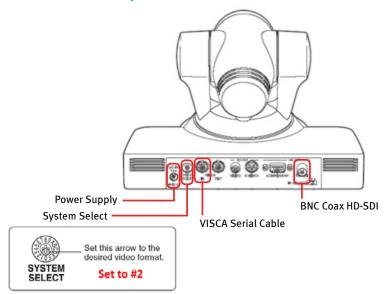
Connecting Your VidyoRoom for Your HD-200 System



- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-1 and to your network.
- 3. Connect to TV using DVI to HDMI cable on TV-1. A second screen can be connected to TV-2.
- Connect HD Camera using BNC Coax HD-SDI cable to CAMERA. (See illustration on page 9.)
- 5. Connect VISCA cable to camera VISCA port and to SERIAL (if applicable).
- 6. Connect Yamaha PJP-25UR or ClearOne Chat 50 to available USB port.
- 7. Connect VGA2USB (optional) to available USB port.

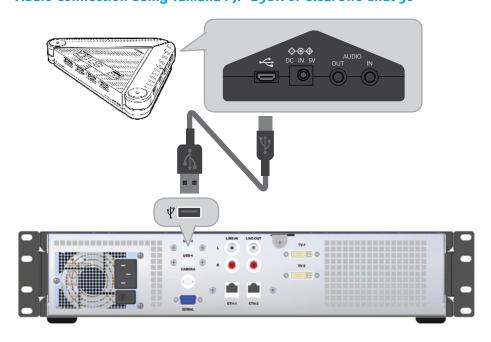
Initial VidyoRoom Setup for HD-200

HD Camera Kit Setup

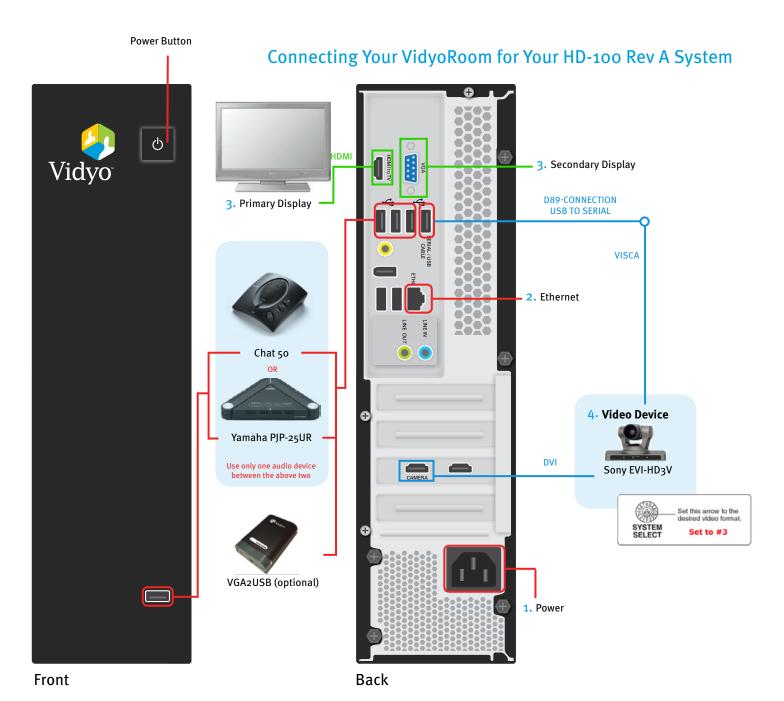


- In order for the Sony EVI-HD1 Camera to Sync with your VidyoRoom HD-200, you need to set the System Select POT screw on the rear of the camera to #2.
- Connect Power Supply to power input.
- Connect VISCA cable to VISCA IN.
- Connect HD-SDI BNC Coax cable to HD OUT.

Audio Connection Using Yamaha PJP-25UR or ClearOne Chat 50



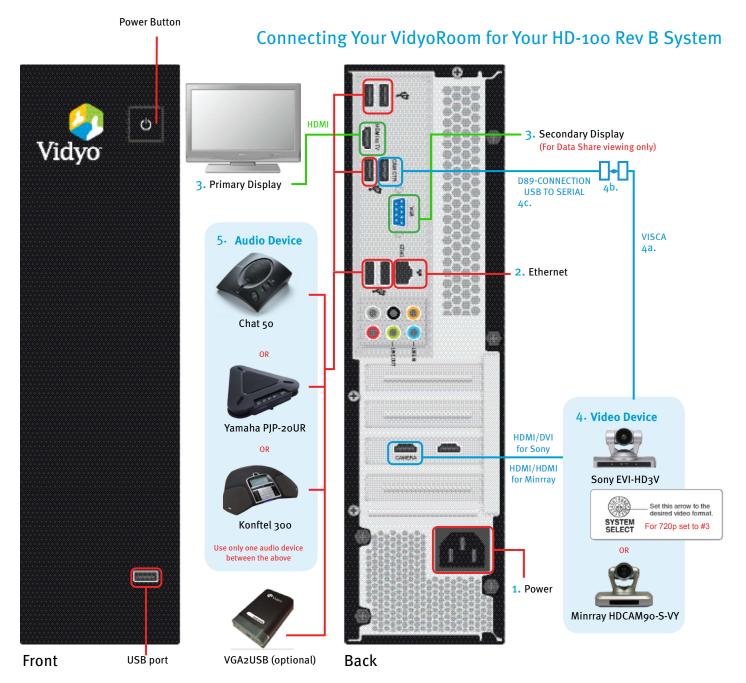
Initial VidyoRoom Setup for HD-100 Rev. A



Do not power on the HD-100 unit until Display(s) and Camera are fully connected and powered on.

- Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect to TV using HDMI to HDMI cable on HDMI-to-TV.
 NOTE: A second screen can be connected to the VGA port (2nd display is for Data Share viewing only).
- 4. Connect Sony EVI-HD3V camera using HDMI/DVI cable
- 5. Connect USB SpeakerPhone cable to an availble USB port.

Initial VidyoRoom Setup for HD-100 Rev. B



Do not power on the HD-100 unit until Display(s) and Camera are fully connected and powered on.

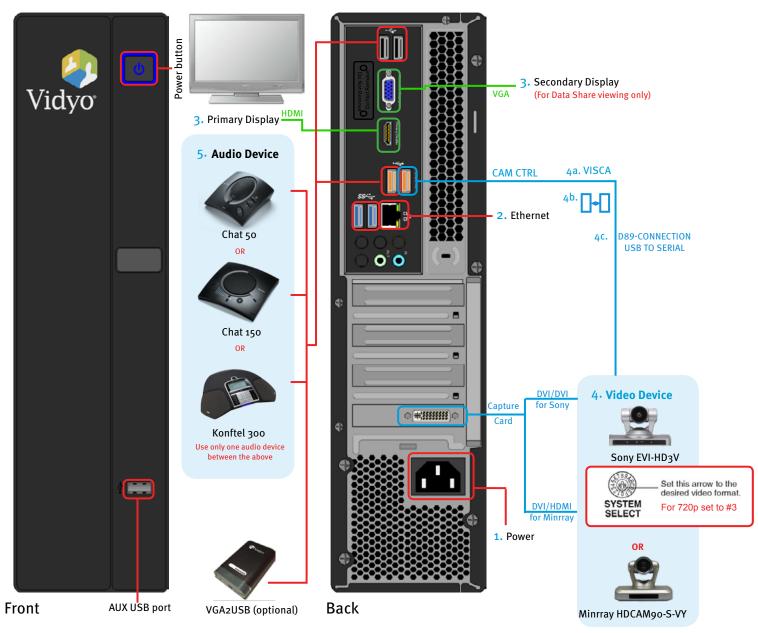
- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect to TV using HDMI to HDMI cable on HDMI-to-TV.

NOTE: A second screen can be connected to the VGA port $(2^{nd}$ display is for Data Share viewing only).

- 4. Connect camera:
 - * For video connection use HDMI/DVI cable for Sony or HDMI/HDMI cable for Minrray
 - * For Camera Control connection:
 - a. Connect VISCA cable to camera
 - b. Connect VISCA cable to USB/Serial DB9 cable
 - c. Connect USB/Serial DB9 cable to the CAM CTRL port on the unit
- Connect USB SpeakerPhone cable to an available USB port.

Initial VidyoRoom Setup for HD-100 Rev. C

Connecting Your VidyoRoom for Your HD-100 Rev C System



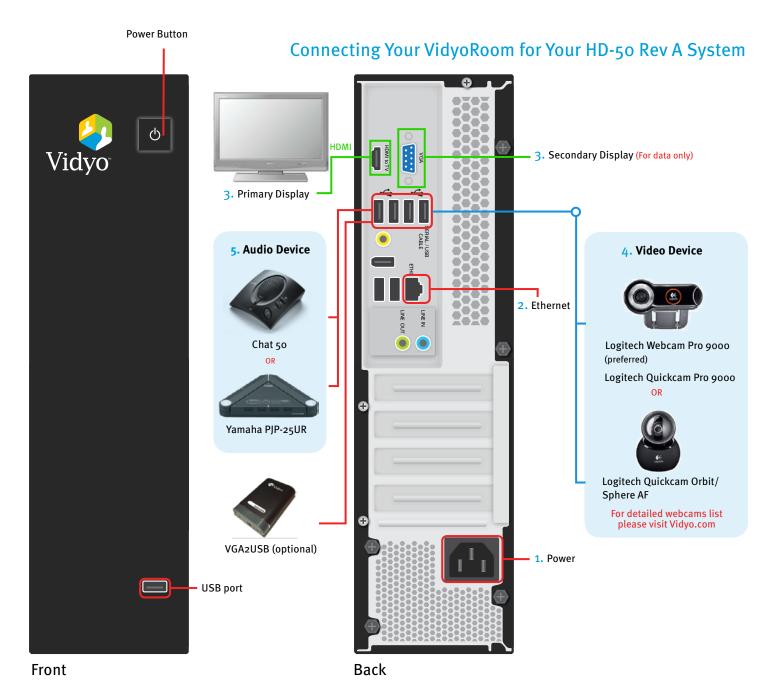
Do not power on the HD-100 unit until Display(s) and Camera are fully connected and powered on.

- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect to TV using HDMI to HDMI cable on HDMI-to-TV.

NOTE: A second screen can be connected to the VGA port $(2^{nd}$ display is for Data Share viewing only).

- 4. Connect camera:
 - * For video connection use HDMI/DVI cable for Sony or HDMI/HDMI cable for Minrray
 - * For Camera Control connection:
 - a. Connect VISCA cable to camera
 - b. Connect VISCA cable to USB 2.0/Serial DB9 cable
 - c. Connect USB/Serial DB9 cable to the CAM CTRL port on the unit
- Connect USB SpeakerPhone cable to an available USB 2.0 port.

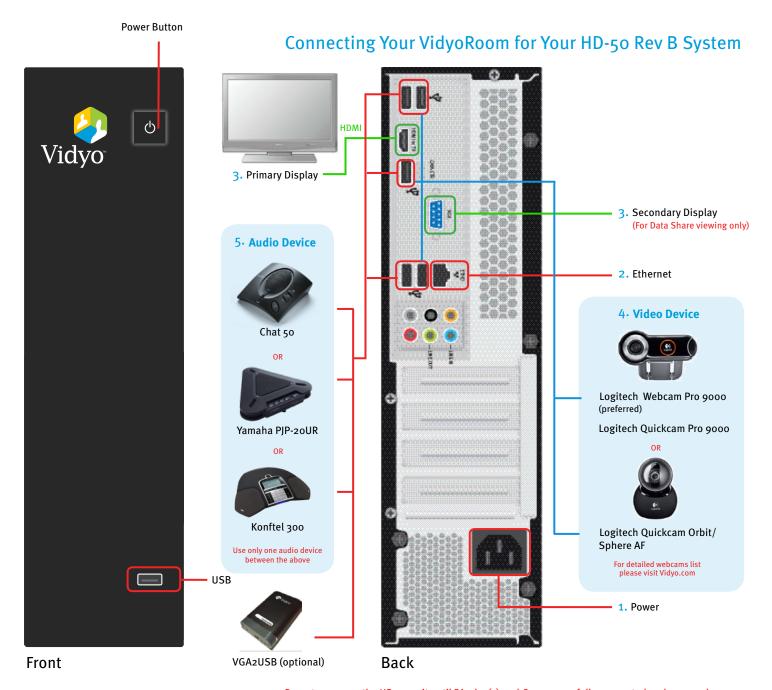
Initial VidyoRoom Setup for HD-50 Rev. A



Do not power on the HD-50 unit until Display(s) and Camera are fully connected and powered on.

- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect to TV using HDMI to HDMI cable on HDMI-to-TV.
 NOTE: A second screen can be connected to the VGA port (2nd display is for Data Share viewing only).
- 4. Connect USB Webcam camera cable to an available USB port.
- 5. Connect USB SpeakerPhone cable to an available USB port.

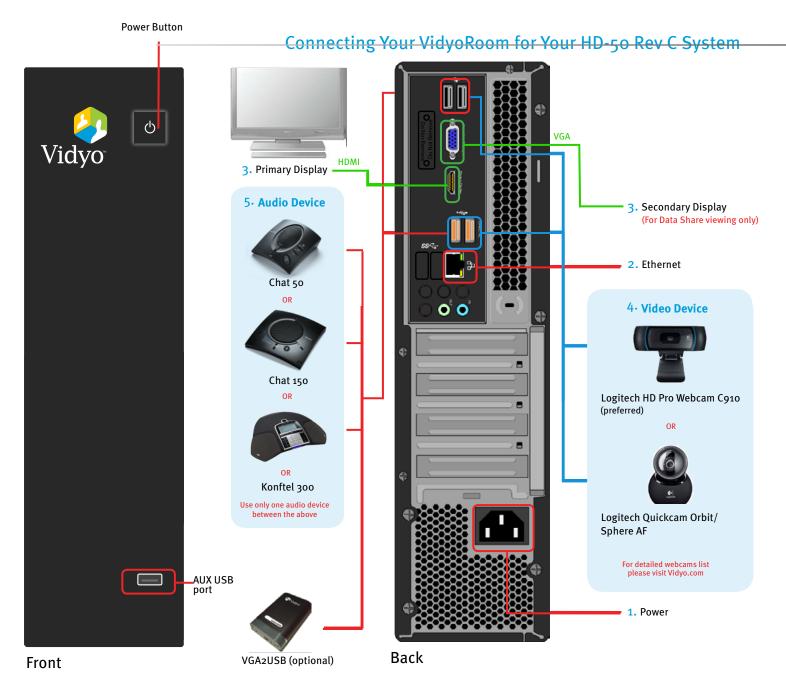
Initial VidyoRoom Setup for HD-50 Rev. B



 $Do \ not \ power \ on \ the \ HD\text{-}50 \ unit \ until \ Display(s) \ and \ Camera \ are \ fully \ connected \ and \ powered \ on.$

- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect to TV using HDMI to HDMI cable or HDMI-to-TV.
 NOTE: A second screen can be connected to the VGA port (2nd display is for Data Share viewing only).
- 4. Connect USB Webcam camera cable to an available USB port.
- 5. Connect USB SpeakerPhone cable to an available USB port.

Initial VidyoRoom Setup for HD-50 Rev. C



Do not power on the HD-50 unit until Display(s) and Camera are fully connected and powered on.

- 1. Connect Power cable.
- 2. Connect Ethernet cable to ETH-O and to your network.
- Connect to TV using HDMI to HDMI cable or HDMI-to-TV.
 NOTE: A second screen can be connected to the VGA port (2nd display is for Data Share viewing only).
- 4. Connect USB Webcam camera cable to an available USB 2.0 port.
- 5. Connect USB SpeakerPhone cable to an available USB 2.0 port.

Initial VidyoRoom Portal Setup

Configuring the VidyoRoom System

You can start configuring your VidyoRoom System simply by turning it on.



The *Account* screen displays the default IP address of your VidyoPortal and the default user name (the model of your VidyoRoom) and password that came with your VidyoRoom. You must change these as described below to use your VidyoRoom.

Note: To change the network settings for the VidyoRoom, see "Network" on page 29.

- Enter the VidyoPortal IP address or URL. (You don't have to type the usual "http://')
- Enter the user name and password for the VidyoPortal.
- Scroll down to the Save button and press OK on the remote control.

Note: If you receive any errors, please double check your User Name, Password, Server address settings and Network configuration.

From the VidyoRoom home page, you can join a meeting, invite people to join your room and place a direct (point-to-point) call to a user. The VidyoRoom home page enables you to search for users and meeting rooms, view users' status (personal status and room status), and set up a *MyContacts* list for easy access. You can also choose settings that determine the language the VidyoRoom displays, configure other options and log out of VidyoRoom.

Contact Search field

My Contacts/Search Results

Join Room button

Call Direct button

My History tab

Add/Delete Contact

Home/Settings Links

Room Name/Status



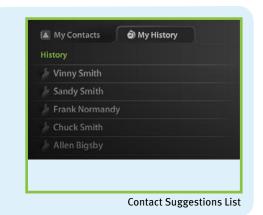
Actions You Can Take from the Home page:

Contact Search Field

You start by searching for a user or public meeting room in the contact search field.

Arrow to the contact search field with the remote control and display the onscreen keyboard by pressing or the D button. Use the keyboard to search by name (first/last/initials) or by extension. If you type an asterisk (*), a list of all registered users sorted alphabetically appears.

When you find a contact or public room in the suggestions list, use the arrow key to scroll to the name and click or to select it. The contact/room status details appear on the right side of the screen (user status and room status). You can review this information to see if the contact or meeting room is available.



For example, the following selected user is offline and her meeting room is empty:



If the contact or room is available, you can place a direct call to the user by clicking the *Call Direct* button or join the room by clicking the *Join Room* button.

Note: You can create a *My Contacts* list as a fast way to place calls to people you meet often with. For information, see "My Contacts" below.

ABOUT MEETING ROOM AND USER STATUSES

A meeting room must be available for you to join it and a user must be available for you to place a direct call. Room and user statuses appear on the right side of the VidyoRoom home page for a selected user or public room. Also, when a meeting room is available, the *Join Room* button is active, and when a user is available, the *Call Direct* button is active.

User status and room status are independent of one another. You can join the room of a user that is not available (online) for a direct call. Likewise, you can call a user whose room is locked or full.

For detailed information about room and user statuses, see "Definitions" on page 4.

My Contacts

My Contacts is an area of the home page beneath the Search Field that displays the following information:

- A list of contacts that appear as "suggestions" from your search results.
- The My Room button enabling you to join your room for a meeting you host.
- The permanent contacts you add to *My Contacts* with the *Add Contacts* button. The *My Contacts* list always remain visible so that you can easily select users to place a direct call or join their meeting room.





My History list

My History

The *My History* tab displays a list of users you recently placed a call to. You can select one of these contacts to join their room or start a direct call. You can also add the to your *My Contacts* list, as described above.

Join Room

The *Join Room* button enables you to join a room to participate in a meeting. You can join your VidyoRoom for a meeting you host, or join a user's room for a meeting they host. The *Join Room* button becomes active when you select your own room or any private or public room that is not full, busy or locked.

- To join your room, arrow to *My Room* and click on the remote, then arrow to the *Join Room* button and click ok.
- To join a contact's room, search for the contact in the *Contact Search* field, arrow to the contact from the contact list and click ok, then arrow to the *Join Room* button and click ok again.

The *Join Room* button is active only when the selected contact's room status allows their room to be joined, e.g., the room is empty, occupied or PIN protected.

While you host a meeting, you see a list of participants on the right side of the home page under *In My Room*. When you VidyoConference with users from other tenants, you also see their tenant name. When a participant joins a conference by phone, their phone number appears in the list of participants. If a participant's phone number is not available, "Unknown Participant" appears in the participant list.

In My Room: Alan B. Good, Homer Simpson, Jay Guiles, Ralph Cramden, Sophia Loren

My Room Participants

VIDYOVOICE (VOICE-ONLY CALLS)

A participant without access to a VidyoPortal as either a registered user or guest can join a conference in your VidyoRoom from a phone. The phone number and extension for calling into your room appear in the *My Room* settings page and the VidyoRoom home page when you select *My Room*.



When a participant joins a conference by phone, their phone number appears in the list of participants, even if they don't broadcast their number.

Call Direct

The *Call Direct* button starts a direct (point-to-point) call with one contact. When you select a contact from *My Contacts*, search results or history, this user's current status appears on the right side of the VidyoRoom home page to indicate their availability. If they are available (online), arrow to the *Call Direct* button and click ok to start a call. The person you are calling sees an alert on their screen to notify them of the call.

Note: A direct call involves just two users; no additional users can join. When you call a meeting room and there are just two of you in the room, it is similar to being in a direct call. The difference is that others can potentially join you in the meeting.

DIALING A LEGACY SYSTEM

A legacy system is a device such as an ordinary telephone or a conferencing system that uses traditional H.323 and SIP-based videoconferencing solutions. A legacy device has no personal room.

To connect to a legacy system that does not exist as a user in the VidyoConferencing system, in the contact search field, enter its extension number followed by the IP (Internet Protocol) address of the legacy system, then click the *Call Direct* button. To obtain the IP address of a legacy system, contact your system administrator.



Add Contact/Remove Contact

If you have contacts that you meet with on a regular basis, you can save them to a *My Contacts* list for easy selection. To add a contact to *My Contacts*, search for the contact, click to select the contact, and then arrow to the *Add Contact* button and click OK. Your contact appears in alphabetical order on the home page under *My Contacts*. If you have many contacts, you may need to scroll to view them all.

You can remove a contact from *My Contacts* by selecting it and clicking the *Remove Contact* button.

Settings

Arrow down and over to the *Settings* link and press on the remote control to access your VidyoRoom settings. For more information on settings, see "Settings" on page 28.



Remove Contact

Onscreen Keyboard

You can use an on-screen keyboard for data entry in fields that display a keyboard icon and/or display the words "OK for Keyboard". In any data entry field, such as the contact search field, click ok to display the onscreen keyboard. Use the up and down keys to navigate the keyboard and click ok to enter each character. When you are done entering information, select the *Done* button and click ok.



Using the VidyoRoom During a Meeting

Upon starting or joining a meeting, the VidyoRoom will display a progress bar. Once you've entered a meeting, you may utilize the following functions to optimize your meeting:

Toggle — Many participants may share their application screens, but you may only view one screen at a time. When shared applications are available from multiple participants, you may toggle between the multiple applications using the Toggle button on the remote control. You may select not to view any of the application shares. Pressing the "*" button allows the VidyoRoom user to view shared applications in full screen size.

Selfview —

For HD-220/200

To see your own video feed, press the Selfview button on the remote control. Your picture will be included in the screen layout. Press the Selfview button again to see yourself in Dual Screen Mode, and a third time to remove yourself from the layout and only view the other meeting participant(s).

For HD-100 & HD-50

Toggles between Picture-in-Picture (PiP), docked, full screen and off (4 modes).

- **Mute** Press the Mute button on the remote control to mute/unmute the sound you're broadcasting.
- Settings This button brings up remote control Help screen.
- **Privacy** This button pauses/blinds your camera feed so that no one in the conference can see your video.
- **Disconnect** Press the red Disconnect button on the remote control to end your session.
- A Swaps the views between displays when in Dual Screen Mode. (HD-220 and HD-200 only)
- **B** Enables DTMF dialing mode. (P2P calls only.)
- C Brings up Far End Camera Control FECC, which allows VidyoRoom users to remotely control cameras on other VidyoRoom systems participating in the same conference. When controlling a far-end camera, the user can pan, tilt or zoom the remote camera to better improve the view of the remote conference room. (The VidyoRoom must have FECC enabled by its owner.)
- D Toggles between Preferred Mode and Non-Preferred Mode. In Preferred Mode: the loudest speaker appears in a larger window among the number of viewed participants, when in Single Screen Mode; with Dual Screens, Preferred Mode is selected by default and toggle is not available.

(HD-220 and HD-200 only)

Settings



Settings enables you to maintain and change your VidyoRoom settings.

Account



In the Portal field of the Account page, you specify the IP address or fully qualified domain name for your VidyoRoom system. In the Name field, you set the VidyoRoom username and in the Password field you set a password. These must be entered to log into the VidyRoom. Be sure to arrow to the Save button on-screen and press or on the remote control.

* You can also change your VidyoRoom settings remotely via a web interface. See page 31 for more information.

Network



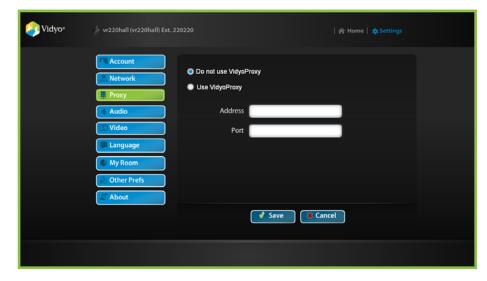
Your VidyoRoom is set to *DHCP* by default. This enables it to automatically obtain its IP address.

To change your VidyoRoom's network settings, select *Use static IP address* and enter your network's settings appropriately:

- IP Address
- Subnet Mask
- Default Gateway
- Primary DNS Server

You can also define a range of UDP ports for use with the VidyoRoom. To set this range, enter the appropriate values in the UDP Start and UDP End fields. Press the OK button on the remote control.

Proxy



If you are using a VidyoProxy, you specify its IP address and port number in the Proxy page. A VidyoProxy routes all data signals through a single port in order to traverse a firewall. Arrow to *Use VidyoProxy* and click ok, then arrow to the Address and Port fields to specify the appropriate network values. Press the ok button on the remote control.

Audio



For most speakerphone systems, both the microphone and speaker volumes should be set to about 60% to start. You can adjust the volume for each one separately.

To save the settings, scroll down to the *Save* button and press the or button on the remote control.

Video

You use the video settings to control your display(s) and camera by setting the number of displays, the display resolution, camera mode and bandwidth. You can also compensate for backlighting and reset the camera. Each VidyRoom model has its own selection of settings, as shown in the following screens. Arrow to the appropriate setting and click ok to select it.

NOTE: Dual Screen Mode in HD-100 &HD-50 is only for data sharing. Both the VidyoRoom HD-100 and HD-50 support 1024x786 (XGA) resolution for the data screen.

Press the OK button on the remote control to save your settings.

HD-220



HD-200



HD-100



HD-50



Note: Note: An Administrator can set transmit and receive bandwidth limits for all users in any Group. This Group policy generally prevails. When a user is in a conference that includes a VidyoRoom, however, the Vidyoroom's transmit bandwidth will override the Group policy.

For example let's say a Group policy is set at a maximum transmit and receive bandwidth of 1 Mbps for all members of the Group. The VidyoRoom, however, can transmit at 2 Mbps. Those participants whose Internet connections and computers can handle the higher bandwidth will receive 2 Mbps from the VidyoRoom.

•

Language



The VidyoRoom System is available in nine languages.

- English
 Spanish
 Italian
 French
 Fortuguese
 Korean
 Finnish
 Polish
- Select your preferred language and press on the remote control, then arrow to the *Save* button on-screen and press on again.

My Room



PIN

To set your room to be PIN-protected, arrow to the box that says Use a PIN Code and press on the remote control. (Conversely, to unset the PIN

requirement, press on the remote control so that the checkmark disappears.)

Then use the remote control buttons to enter/change your PIN. Participants will be prompted to type this PIN before being admitted to your VidyoRoom, so be sure to share your PIN with invited participants prior to the meeting.

Arrow to the *Save* button on-screen and press on the remote control.

Other Prefs



The Other Prefs page allows you to select between Internal IR Receiver and External IR Receiver and configure the following features:

Auto-Answer Enable/Disable

Allows you to configure the VidyoRoom to automatically receive calls or not. (To configure this from the web, see page 31.)

Join/Exit tones

The user can choose to hear a tone every time someone joins or leave the conference.

Far End Camera Control

This setting determines whether or not other users in a conference with your VidyoRoom can control your camera. The camera in your room must be capable of electronic tilt and pan as, for example, the Sony EVI-HD1 is for FECC to work.

Enable settings access code

You can set an access code to prevent unauthorized access to your VidyoRoom configuration settings. When a user accesses the settings from the VidyoRoom home page, they must enter this access code to be access the settings. Arrow to

Settings

the *Enable settings access code* checkbox and click ok, then arrow to the *Settings Access Code* field and enter an access code.

Press the OK button on the remote control to save your settings.

Restart VidyoRoom

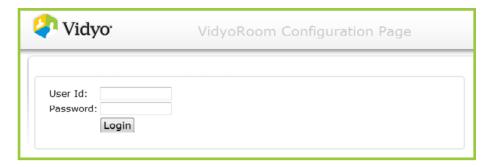
To restart the VidyoRoom, arrow to the *Restart VidyRoom* button and press ok. It will take several seconds for the VidyoRoom to restart.

About

The about page displays version and release information for your model of VidyoRoom. The *About* page will vary somewhat for each model, but contains the same kind of information. The *About* page for an HD-50 is shown below.



Rather than configure your VidyoRoom onsite in the conference room in which it resides, you can also change VidyoRoom settings remotely via a web interface. In an internet browser, enter the IP address of your VidyoRoom followed by :88 (port number). A login screen will appear.



The default settings are:

User name: admin

Password: VidyoRoom (case sensitive)

Note that you can change your password after logging in by clicking Reset Password in the navigation

The next three pages show you what the Settings tab on the HD-220/200, the HD-100 and the HD-50 look like. Only the HD-50 looks different from the others.

Much of what you see on these pages is fairly self-explanatory so we'll cover only the less obvious options.

The Basics

The Account, Network, UDP Port Range and Proxy sections work just as they would for any other server. Your choices on the Link Speed & Duplex dropdown menu, as you can see, are Auto/Auto, 100Mbps Duplex and 1Gbps. The default setting is Auto/Auto and under most circumstances you shouldn't change it unless requested to do so by your network adminstrator.

Audio

Set the micrphone and speaker inputs to match the type of connection you're using for them. You can drag the sliders to change the maximum sensitivity of the mic and maximum volume of the speakers.

Video

Select either Single or Dual Displays to match your configuration.

Select whether you want to use 720p or 1080p Resolution. (If your display can only do 720p there's no advantage in selecting 1080p. If your display can do 1080p you can choose 720p if you want to use less bandwidth.)

Select the maximum bandwidth at which you want the VidyoRoom to transmit.

Choose your Transmit Resolution. (1080p30 won't be an available option if you Maximum Bandwidth is to less than 2Mbps. You'll also need to click the Reset Camera option if you change Transmit Resolution.)

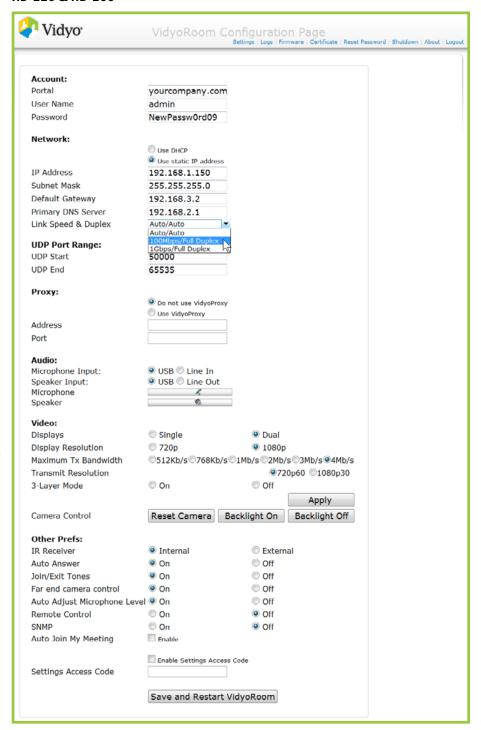
Turning 3-Layer Mode on can provide a higher quality experience to users of mobile devices.

The Apply button puts any changes you make to the settings above into effect immediately. There's no need to reboot the VidyoRoom.

Settings

For more information about the different settings, please see pages 23-33. You can set these from the web configuration pages:

HD-220 & HD-200



Other Prefs

If you're using the IR receiver built into your display set the IR Receiver to Internal. If you're using an external IR receiver set IR Receiver to External (Did we mention that a lot of this is self-explanatory?).

Auto Answer is similarly self-explanatory. Set it to On if you want the VidyoRoom to answer calls automatically.

Turning Join/Exit Tones On alerts you with a tone as participants join or leave a conference.

Far End Camera Control (FECC) allows remote conference participants to pan and tilt the VidyoRoom's camera using their VidyoDesktop software so they can "look around the room" so to speak. You can turn FECC Off if you want to.

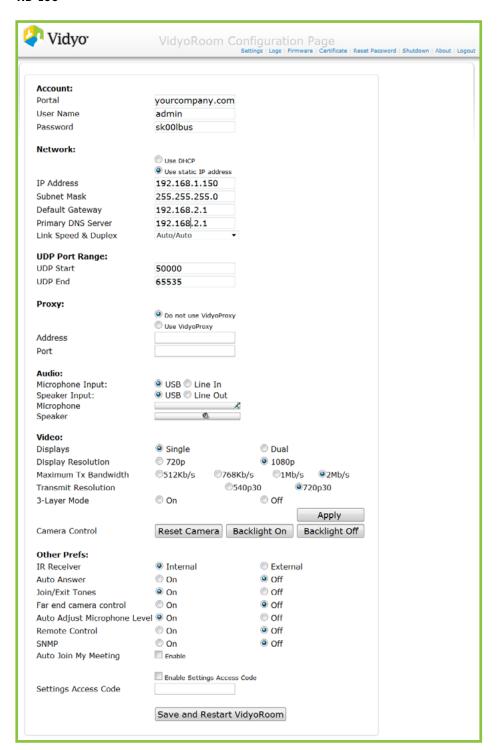
Turn Auto Adjust Microphone On to increase the mic's sensitivity up when a softspoken person speaks and turn it down a bit when things get loud.

(Remote Control is an option that will be operational in a future release.)

If you enable Auto Join My Meeeting the room system will automatically join its own meeting whenever it's started. The only way to disable this behavior is to come back to this page and deselect the checkbox.

The Settings Access Code can be set so that if someone wishes to change the VidyoRoom's settings from the room GUI, they will be required to enter the access code entered in this field.

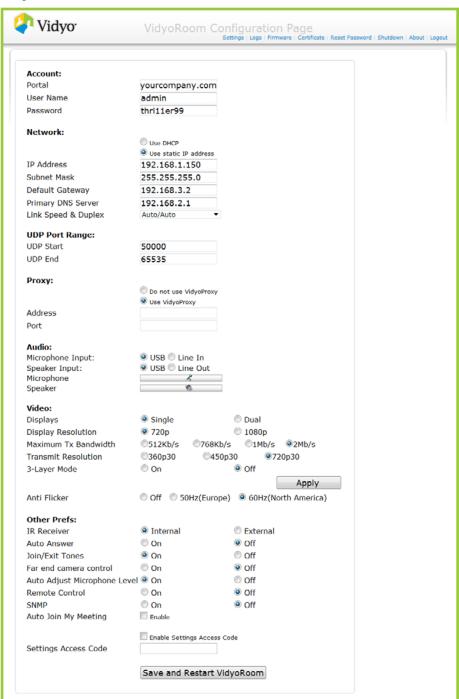
HD-100



As you can see, the HD-50 has the same controls as its more capable siblings. The one thing it can't do is 1080-30/60 as a Transmit Resolution

In fact, it has one setting the other models don't have, Anti Flicker. If your users use webcams that don't have the anti-flicker feature you can enable it to handle the job for them.

HD-50



Note that the send resolution for the HD-50 is only available through the web configuration. The actual resolution and frame rate is determined by the webcam being used and can be limited by the lighting conditions:

Video Resolutions	Logitech QuickCam Pro 9000 Orbit AF	Logitech WebCam Pro 9000
HD-720p (1280x720)	15 fps	30 fps
540p (960x540)	15 fps	30 fps
450p (800x450)	20 fps	30 fps
36op (64ox36o)	30 fps	30 fps

 Note that the Link Speed and Duplex configuration option is only available through the web configuration. The usual setting will be auto/auto, but it can be set to 100/Full if the ethernet switch is also configured to 100/Full.

Logs



The Logs tab provides useful information for Vidyo Customer Support in the event you need to contact them. To troubleshoot a problem they may ask you to increase the log level. (They'll tell you exactly what to type into the Log Levels field. If you need only to increase the levels while the issue is being resolved click the Apply Temporarily button. The log levels will return to their prior level when you reboot the VidyoRoom.

Firmware



You may be required from time to time to upgrade your VidyoRoom to a new version or recover to a previous working version. You may also need to upgrade your VidyoRoom in the event of a hardware malfunction or system failure. In this case, upgrading restores the VidyoRoom software to the last installed version.

Note: When you upgrade your VidyoRoom, you lose all your network and other settings and must reconfigure the unit. You may want to record your current settings before beginning the upgrade process.

The *Firmware* page displays the current installed version of the VidyRoom system and the current base image version installed on the machine. The Vidyo-Room HD-50 and HD-100 can store two image files while the HD-220 can store more.

- To restore the VidyoRoom software to the last installed version, click a checkbox to select the image file, and then click the Re-Image button.
- To upgrade using a new image from Vidyo, click the *Browse* button to locate the .tbv file and click the *Upload & Re-Image* button.

The upgrade process can take up to five minutes and will automatically reboot the VidyoRoom system when successful. The upgrade progress appears in a console on the VidyoRoom monitor.

- You receive an alert if you are upgrading with the same image file already installed on your VidyRoom. If you are restoring the current image, acknowledge this alert and proceed with the upgrade.
- If you encounter a FAIL error, note the red error code in the lower left corner of the screen and contact Vidyo technical support.

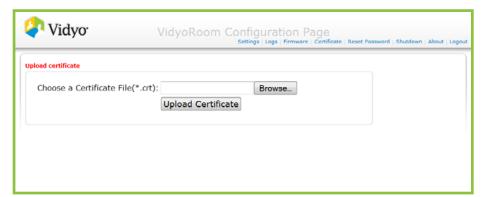
When the upgrade process completes, reconfigure your account and network settings, as described in "Initial VidyoRoom Setup" on page 21.

Note: The VidyoRoom can also be re-imaged via a command-line interface if your machine is not on a network or a system failure prevents you from using the web interface. Contact Vidyo for a tech note on this procedure.

Certificate

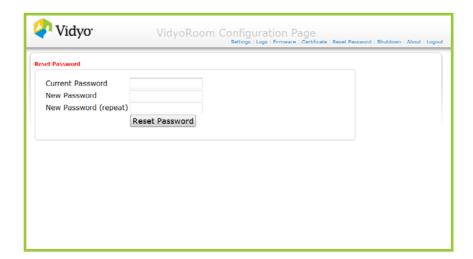
The *Certificate* tab is used to upload a certificate authority file, including a self-signed certificate.

Note: The file loaded is CA Root Certificate file and replaces any previous CA file. There is no option to load a default CA, so if you point your VidyoRoom to another portal with a different CA, be sure to upload the correct CA in the *Certificate* tab.



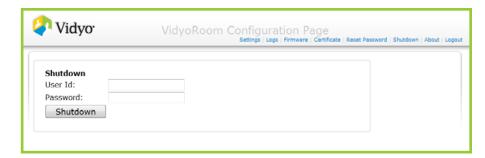
Reset Password

To reset your password, enter your new password twice to confirm.



Shutdown

When you want to shut down the VidyoRoom the word Shutdown in the menu. The Shutdown will require you to re-enter your User Id and Password before it will allow you shut down the system by clicking the Shutdown button.



About

The *About* page lists your VidyoRoom model number, serial number (HD-200 only), and version. The following *About* page is from an HD-100. Other models are similar in appearance.



Logout

When you click Logout on the menu a confirmation dialog box opens. Click OK to log out. Click Cancel to stay on the page.

Application

	HD-220 A, B, C	HD-200	HD-100 A, B, C	HD-50 A, B, C
Video				
Primary Video Codec	H.264 Annex G (SVC)	H.264 Annex G (SVC)	H.264 Annex G (SVC)	H.264 Annex G (SVC)
Legacy Video Codec	H.264 AVC, H.263+ via the VidyoGateway	H.264 AVC, H.263+ via the VidyoGateway	H.264 AVC, H.263+ via the VidyoGateway	H.264 AVC, H.263+ via the VidyoGateway
Transmit Max Resolution & Frame Rate				
Main Video	Up to:	Up to:	Up to:	Up to:
	HD 1080P @ 30 FPS @ 4 Mbps or 2 Mbps	HD 720P @ 30 FPS @ 4 Mbps, 2 Mbps or 1 Mbps	HD 720P @ 30 FPS @ 2 Mbps or 1 Mbps	HD 720P @ 30 FPS @ 2 Mbps, 1 Mbps or 768 Kbps
	HD 720P @ 60 FPS @ 4 Mbps, 2 Mbps or 1 Mbps	HD 720P @ 30 FPS @ 768 Kbps	540P @ 30 FPS @ 2 Mbps, 1 Mbps, 768 Kbps or 512 Kbps	450P @ 30 FPS @ 2 Mbps, 1 Mbps, 768
	HD 720P @ 30 FPS @ 768 Kbps	540P @ 30 FPs @ 2Mbps, 1 Mbps, 768 Kbps or 512 Kbps	360P @ 30 FPS @ 1 Mbps, 768 Kbps or	Kbps or 512 Kbps 360P @ 30 FPS @ 2 Mbps, 1 Mbps, 768
	540P @ 30 FPS @ 2Mbps or 1 Mbps or	360P @ 30 FPS @ 1Mbps or 768 Kbps	512 Kbps	Kbps or 512 Kbps
	768 Kbps or 512 Kbps	or 512 Kbps		
	360P @ 30 FPS @ 1 Mbps or 768 Kbps or 512 Kbps			
Receive Max				
Resolution & Frame Rate				
Main Video	2 x HD 1080P @ 30FPS or	1 x HD 720P @ 60FPS	2 x HD 720P @ 60FPS	1 x HD 720P @ 30FPS
	2 x HD 720P @ 60FPS			
Document Video	Up to QSXGA (fitted to screen resolution)	Up to QSXGA (fitted to screen resolution)	Up to QSXGA (fitted to screen resolution)	Up to QSXGA (fitted to screen resolution)
Screen Layout &	Full-Screen, 16:9	Full-Screen, 16:9	Full-Screen, 16:9	Full-Screen, 16:9
Aspect Ratio				
Local Preview	Supported	Supported	Supported	Supported
Multi Participants Views	Two Screens	Two Screens		
VIEWS	- Voice Activated	- Voice Activated	- Voice Activated	- Voice Activated
	- Continuous Presence	- Continuous Presence	- Continuous Presence	- Continuous Presence
Multi Participants	- Automatic	- Automatic	- Automatic	- Automatic
Layout Control	- Manually set the	- Manually set the	- Manually set the	- Manually set the
	number of viewable	number of viewable	number of viewable	number of viewable
	sources	sources	sources	sources
Dual Screen Support	Yes	Yes	Yes (Sharing only)	Yes (Sharing only)

44

Application

	HD-220 A, B, C	HD-200	HD-100 A, B, C	HD-50 A, B, C
Audio				
Primary Audio Codec	SPEEX Wideband 16Khz (32Khz sampling)	SPEEX Wideband 16Khz (32Khz sampling)	SPEEX Wideband 16Khz (32Khz sampling)	SPEEX Wideband 16Khz (32Khz sampling)
Legacy Audio Codecs	G.711 (A-, μ -Law), G.722, via VidyoGateway	G.711 (A-, μ -Law), G.722, via VidyoGateway	G.711 (A-, μ -Law), G.722, via VidyoGateway	G.711 (A-, µ -Law), G.722, via VidyoGateway
Remote Unit Manageme	ent and Control			
Interface	Web-based control via the VidyoPortal			
Software Update	Automatic, Downloadable from VidyoPortal			
User Interface				
	Multilingual Support- English, Spanish, French, German, Italian, Portuguese, Japanese, Simplified Chinese, Korean, Finnish, Polish	Multilingual Support- English, Spanish, French, German, Italian, Portuguese, Japanese, Simplified Chinese, Korean, Finnish, Polish	Multilingual Support- English, Spanish, French, German, Italian, Portuguese, Japanese, Simplified Chinese, Korean, Finnish, Polish	Multilingual Support- English, Spanish, French, German, Italian, Portuguese, Japanese, Simplified Chinese, Korean, Finnish, Polish
Conference Control				
	Through VidyoPortal	Through VidyoPortal	Through VidyoPortal	Through VidyoPortal
Network and IP				
Protocol		SIP RFC 3261 (Future version)		
Maximum Data Rate	4 Mbs standard (6 Mbps on demand)	6 Mbps	4 Mbps	2 Mbps
NAT & Firewall Traversal	Supported	Supported	Supported	Supported
Encryption	AES, 128bit	AES, 128bit	AES, 128bit	AES, 128bit
Supported Camera				
	Sony EVI-HD7V (provides 1080P @ 30FPS) Preferred Sony EVI0HD3V (provides 720P @ 60FPS) Minrray HDCAMV90-S-VY (provides 1080p@30fps)	Sony EVI-HD1	Sony EVI-HD3V (with DVI interface) Preferred Sony EVI-HD1 (with SDI to HDMI Converter) Minrray HDCAMV9o-S-VY (provides 720p@30fps)	Logitech Webcam Pro 9000 (provides 720P @ 30FPS) Preferred Logitech Quickcam Pro 9000 Logitech Quickcam Orbit AF

Physical

	HD-220 A, B, C	HD-200	HD-100 A, B, C	HD-50 A, B, C
Form Factor				
	Stand-alone Chassis, (Freestanding or 19" Rack-mountable)	Stand-alone Chassis (Freestanding or 19" rack-mountable) ₁	Stand-alone Freestanding Chassis	Stand-alone Freestanding Chassis
Dimensions				
Height	14.56" (370mm)	3.6" (91mm)	13" (330mm)	13" (330mm)
Width	3.44" (87.4mm)	17.4 (442mm)	3.5" (89mm)	3.5" (89mm)
Depth	12.59" (320mm)	17.1 (434mm)	12.75" (324mm)	12.75" (324mm)
Gross Weight	13.0 lbs (5.89kg)	32 Lbs (14.5kg)	10.0 Lbs (4.53kg)	10.0 Lbs (4.53kg)
Form Factor		2U Rackmount		
Physical Interfaces				
Camera In	1 x HDMI	1 x HD-SDI – BNC	1 x HDMI	1 x USB
Camera Control	1 x RS-232 (through supplied Serial/USB dongle)	1 x RS-232	1 x RS-232 (through supplied USB adapter)	
Video Out	2 x DisplayPort (through supplied DisplayPort to DVI converter)	2 x DVI-I	1 x HDMI 2 x VGA (for content)	1 x HDMI 1 x VGA (for content)
Audio In	1 x 3.5mm Stereo Jack, USB	2 x RCA (Stereo)	1 x 3.5mm Stereo Jack	1 x 3.5mm Stereo Jack
Audio Out	1 x 3.5mm Stereo Jack, USB	2 x RCA (Stereo)	1 x 3.5mm Stereo Jack	1 x 3.5mm Stereo Jack
USB-2	6 (2 front, 4 rear)	4 (2 front, 2 rear)	5 (1 front, 4 rear)	5 (1 front, 4 rear)
Network	1 x Gigabit Ethernet- Supports 10BASE-T, 100 BASE-TX, & 1000 BASE-T, RJ45 outputs	2 x Gigabit Ethernet- Supports 10BASE-T, 100 BASE-TX, & 1000 BASE-T, RJ45 outputs	1 x Gigabit Ethernet- Supports 10BASE-T, 100 BASE-TX, & 1000 BASE-T, RJ45 outputs	1 x Gigabit Ethernet- Supports 10BASE-T, 100 BASE-TX, & 1000 BASE-T, RJ45 outputs
Power Supply				
	Auto-switching 300W AC to DC power supply w/ PFC 100-240V, 50-60Hz, 4-2Amp	520W AC to DC power supply w/ PFC 100- 240V, 50-60Hz, 7-3Amp	Auto-switching 300W AC to DC power supply w/ PFC 100-240V, 50-60Hz, 4-2Amp	Auto-switching 300W AC to DC power supply w/ PFC 100-240V, 50-60Hz, 4-2Amp

Physical

	HD-220 A, B, C	HD-200	HD-100 A, B, C	HD-50 A, B, C
Operating Environme	nt			
Operating Temperature Range	10 to 35°C (50 to 95°F)	10 to 35°C (50 to 95°F)	10 to 35°C (50 to 95°F)	10 to 35° ^C (50 to 95°F)
Non-Operating Temperature	-40 to 70° ^C (-40 to 158°F)	-40 to 70° ^C (-40 to 158° ^F)	-40 to 70° ^C (-40 to 158° ^F)	-40 to 70° ^C (-40 to 158° ^F)
Humidity Range	8% to 90% (non-condensing)	8% to 90% (non-condensing)	8% to 90% (non-condensing)	8% to 90% (non-condensing)
Non-Operating Humidity Range	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Regulatory				
	EMI/EMC: EN55022, EN55024, FCC, VCCI, Australian/ New Zealand, MIC (Korea) Safety: USA-TUV certified, Canada-TUV certified, Europe/CE Mark EN 60950/IEC 60950-Compliant China: CCC Certification Environmental: RoHS compliant	USA-UL listed, FCC, Canada-CUL listed, Europe/CE Mark EN 60950/IEC 60950-Compliant	EMI/EMC: EN55022, EN55024, FCC, VCCI, Australian/ New Zealand, MIC (Korea) Safety: USA - TUV certified, FCC, Canada - TUV certified, Europe/CE Mark EN 60950/IEC 60950-Compliant China: CCC Certification Environmental: ROHS compliant	EMI/EMC: EN55022, EN55024, FCC, VCCI, Australian/ New Zealand, MIC (Korea) Safety: USA - TUV certified, FCC, Canada - TUV certified, Europe/CE Mark EN 60950/IEC 60950-Compliant China: CCC Certification Environmental: ROHS compliant
Model Number	VIDYO-PROD-002 VIDYO-PROD-003	VIDYO-PROD-001	VIDYO-PROD-001 VIDYO-PROD-003	VIDYO-PROD-001 VIDYO-PROD-003

108op Configuration with the VidyoRoom HD22o Appendix

Note: The VidyoRoom system must be version 2.0.3 or higher to support 1080p encode resolutions.

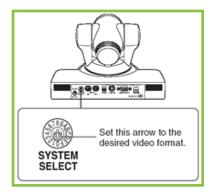
To enable the 108op/3ofps transmit format for calls on the VidyoRoom HD22o system, you must properly configure both the camera and the room system.

Prior to connecting the Sony EVI-HD₃V or EVI-₇V camera to the VidyoRoom, select the resolution desired and configure the camera to output that video format. To set the camera's resolution, locate the POT screw control dial in the rear of the camera marked SYSTEM SELECT. The numbers on the POT dial correspond to the video resolution and frame rates output from the camera to the VidyoRoom HD₂₂₀ system.

The Minrray camera is set via VISCA, so VISCA must be connected.

Setting Video Formats

You set video formats on the back of the camera as shown below:



Video Format Table

Switch Position	Video Format	EVI-3V / EVI-7V
0	1080p / 60 fps	7V Only
1	1080p / 30 fps	7V Only
2	1080i / 60 fps	7V Only
3	720p / 60 fps	Both
4	720p / 30 fps	Both
5	VGA/60 fps (Letterbox)	Both
8	1080p / 50 fps	7V Only
9	1080p / 25 fps	7V Only
Α	1080i / 50 fps	7V Only
В	720p / 50 fps	Both
С	720p / 25 fps	Both

For configuration supporting 1080p/30fps, set the Sony EVI-HD7V camera to capture in 1080i/59.94 mode. The correct setting for this option is position #2 on the SYSTEM SELECT POT dial control.

108op Configuration with the VidyoRoom HD22o Appendix

Note: After configuring the camera, reset it to activate the new video format setting.

In the VidyoRoom system user interface, navigate to the *Video* settings option and enable the proper camera and display resolutions, as shown below:



For the Display Resolution setting, select 1080p.

Note: For optimal video quality in 1080p mode, set the Maximum Transmit (TX) bandwidth to a value greater than 2Mbps. Also note that it is possible to increase the call video rate while in an active call by pressing 9# on the VidyoRoom system remote control.

The VidyoRoom must be configured for a Transmit Resolution of 1080p/30.

Note: If VidyoRoom HD100 or HD50 systems are to receive a 1080p/30 video format from the HD220 systems, the display resolution on those systems must be configured for 1080p resolution.

Regulatory Compliance Appendix

Installation Instructions

- **A. Elevated Operating Ambient** If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) of 40° C.
- **B. Reduced Air Flow** Installation of the equipment in a rack or cabinet should be such that the amount of airflow required for safe operation of the equipment is not compromised.
- **C. Mechanical Loading** Mounting of the equipment in the rack or cabinet should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- **D. Circuit Overloading** Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- **E. Reliable Grounding** Reliable grounding (earthing) of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit. (e.g., use of power strips).
- **F. Redundant Power Supplies** Where redundant power supplies are provided with the equipment, each power supply shall be connected to a separate circuit to optimize the equipment redundancy.
- **G. Servicing** Prior to servicing the equipment, disconnect all power supplies.
- **H. Power Supply Cord** The power supply cord is used as the main disconnect device. Ensure that the socket outlet is located/installed near the equipment and is easily accessible.
- **I. Circuit Overloading** This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that a fuse or circuit breaker no larger than 120 VAC, 20A U.S. (240 VAC, 10A international) is used on the phase conductors (all current-carrying conductors).

Regulatory Compliance Appendix

USA (FCC)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense.

European Union (EU)

Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

China (CCC)

声明

为A级产品,在生活环境中,该产品可能会造成无线电干扰。 在这种情况下,可能需要用户对其干扰采取切实可行的措施。

Japan (VCCI)

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波障害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Rack Mounting the HD-220 Appendix

Follow the steps in the order given to complete the installation process in a minimal amount of time. Please read this section in its entirety before you begin the installation procedure outlined in the sections that follow.

Decide on a suitable location for the rack unit that will hold the HD-220 unit. It should be situated in a clean, dust-free area that is well ventilated. Avoid areas where heat, electrical noise and electromagnetic fields are generated. You will also need it placed near a grounded power outlet.

Choosing a Setup Location

- A. Leave enough clearance in front of the rack to enable you to open the front door completely (~25 inches [63.5cm]).
- B. Leave enough clearance on top of the unit to enable intake fan to work properly (minimum of 3/8 inches [1cm], recommended clearance is 1.75" [4.44cm])
- C. Leave approximately 30 inches [76.2cm] of clearance in the back of the rack to allow for sufficient airflow and ease in servicing.

Rack Precautions

- A. Ensure that the leveling jacks on the bottom of the rack are fully extended to the floor with the full weight of the rack resting on them.
- B. In a single rack installation, stabilizers should be attached to the rack.
- C. In multiple rack installations, the racks should be coupled together.
- D. Always make sure the rack is stable before extending a component from the rack.
- E. You should extend only one component at a time extending two or more simultaneously may cause the rack to become unstable.
- F. Always keep the rack's front door closed when not servicing to maintain proper cooling.

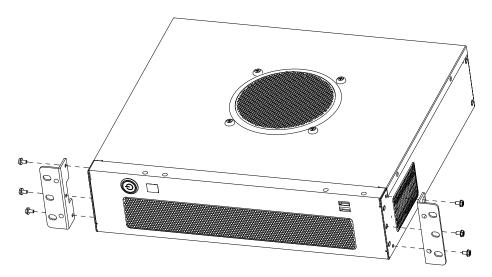
Basic HD-220 Bracket Installation Procedure

The HD-220 comes with two rack mounting brackets, which are attached on each side at the front of the chassis with 3 screws.

Rack Mounting the HD-220 Appendix

Installing the HD-220 into the Rack

To mount the system into a rack, simply screw these brackets directly to the front of the rack (three screws for each bracket).



Rack Mounting Considerations Ambient Operating Temperature

If installed in a closed or multi-unit rack assembly, the ambient operating temperature of the rack environment may be greater than the ambient temperature of the room. Therefore, consideration should be given to installing the equipment in an environment compatible with the VidyoRoom's maximum rated ambient temperature (35°C [95°F]).

Reduced Airflow

Equipment should be mounted into a rack so that the amount of airflow required for safe operation is not compromised.

Mechanical Loading

Equipment should be mounted into a rack so that a hazardous condition does not arise due to uneven mechanical loading.

Circuit Overloading

Consideration should be given to the connection of the equipment to the power supply circuitry and the effect that any possible overloading of circuits might have on overcurrent protection and power supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Rack Mounting the HD-220 Appendix

Reliable Ground

A reliable ground must be maintained at all times. To ensure this, the rack itself should be grounded. Particular attention should be given to power supply connections other than the direct connections to the branch circuit (*i.e.*, the use of power strips, etc.).